

Project Initialization and Planning Phase

Date	11 June 2025
Team ID	SWTID1749627644
Project Name	Human Resource Management: Predicting Employee Promotions using Machine Learning
Maximum Marks	3 Marks

Define Problem Statements:

In modern organizations, especially large-scale enterprises and fast-growing startups, identifying the right employees for promotion is often challenging due to the volume and complexity of workforce data. Traditional methods can be subjective, inconsistent, and time-consuming, leading to missed opportunities for recognizing high-potential talent. This project aims to develop a machine learning model that can accurately predict the likelihood of employee promotions based on factors such as performance ratings, training scores, tenure, awards, and more. By automating and optimizing the promotion decision process, the model supports fair, data-driven human resource management that enhances employee engagement, improves retention, and drives organizational growth.

I am	HR manager in a large company
I'm trying to	identify high-performing employees eligible for promotion
But	it's difficult to manually evaluate thousands of employee records fairly and consistently
Because	the process is time-consuming and prone to human bias
Which makes me feel	overwhelmed and worried about missing deserving talent

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	HR manager in a large company	identify high-performing employees eligible for promotion	it's difficult to manually evaluate thousands of employee records fairly and consistently	the process is time-consuming and prone to human bias	overwhelmed and worried about missing deserving talent
PS-2	founder of a fast-growing startup	build a transparent, merit-based promotion system	we don't have a structured approach to track employee growth and potential	decisions are often based on intuition rather than data	uncertain and concerned about employee trust and retention
PS-3	responsible for talent retention in a highly competitive industry	identify and nurture employees with leadership potential	I struggle to spot early signs of promotability at scale	we lack a predictive system to analyze key performance indicators	frustrated and at risk of losing top performers to competitors